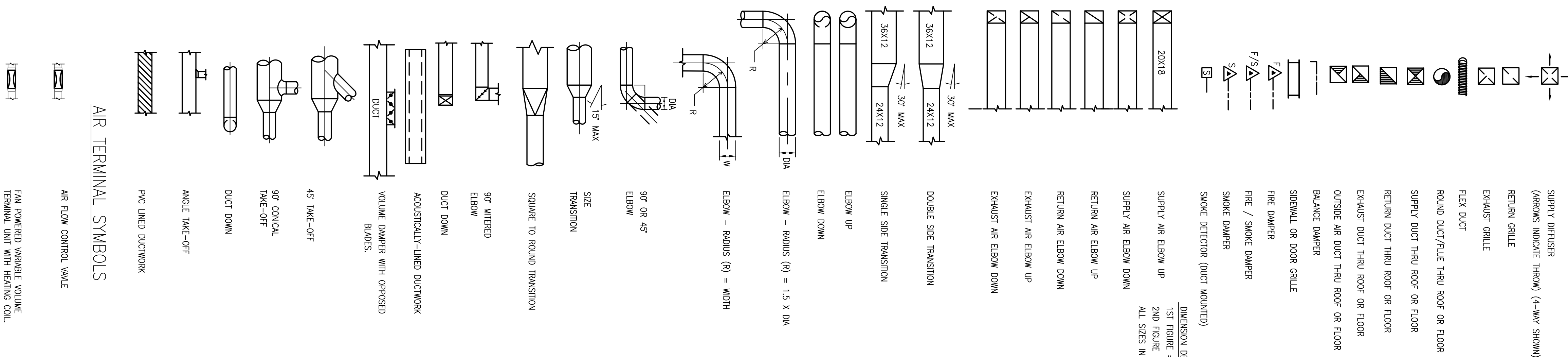


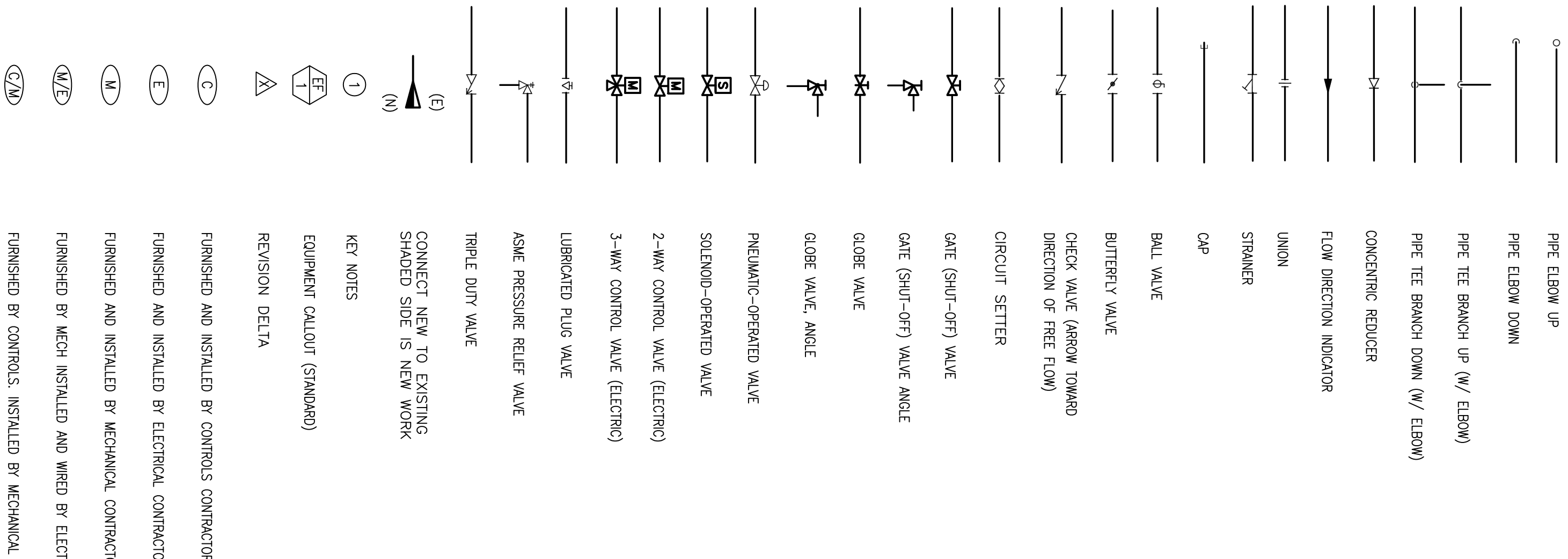
## MECHANICAL ABBREVIATIONS

[illegible]

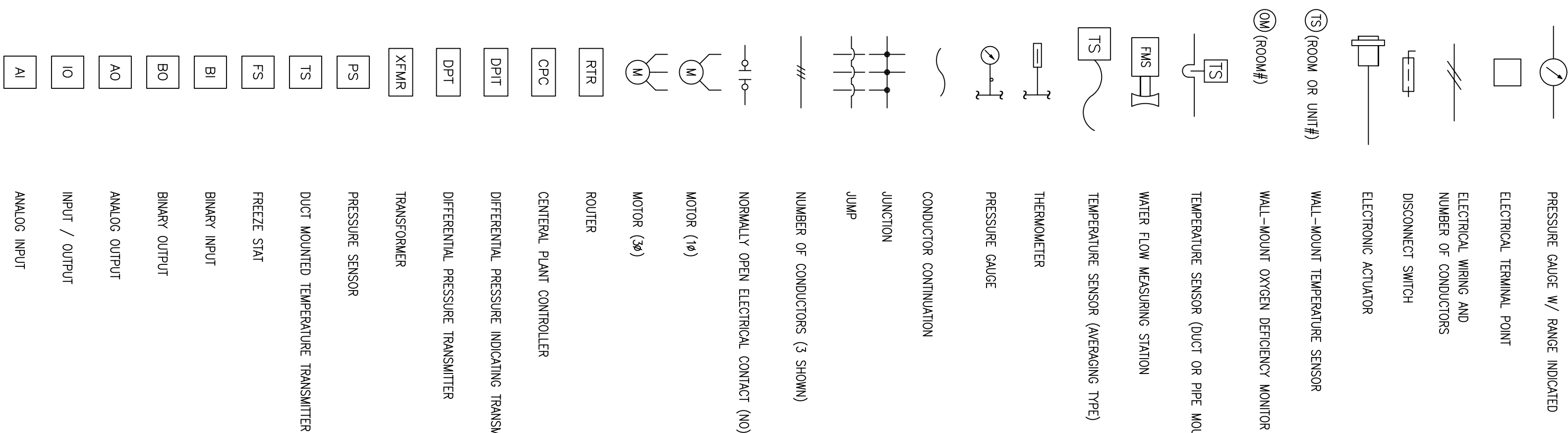
## MECHANICAL DUCTWORK SYMBOLS



## MECHANICAL PIPING SYMBOLS



## MECHANICAL CONTROL SYMBOLS



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# MECHANICAL GENERAL NOTES

- A. ROUTE DUCTWORK IN COORDINATION WITH OTHER TRADES. ROUTE DUCTWORK AS HIGH AS POSSIBLE AND ROUTE DUCTWORK WITH A STRUCTURE WHERE POSSIBLE.
- B. UNLESS OTHERWISE NOTED SUPPLY DUCT UPSTREAM OF SW BOX IS THE SAME SIZE AS THE DUCTWORK FOR CLEAN AND ALL SIZES HAVE CLEAN.
- C. DUCT SIZES INDICATED FOR CONNECTION TO EQUIPMENT MAY VARY FROM EXACT UNIT TO UNIT CONNECTION.
- D. TEMPERATURE SENSORS SHALL BE INSTALLED AT 4" OR 4FT UNLESS NOTED OTHERWISE. COORDINATE JUNCTION BOX INSULATION WITH ELECTRICAL CONTRACTOR.
- E. FREE DUCTWORK SHALL BE 1-1/2 HOUR RATED UNLESS OTHERWISE NOTED.
- F. CONTRACTOR SHALL PROVIDE ALL NECESSARY TRANSITIONS TO AND FROM CONTACT WITH DUCTWORK, PIPING, STRUCTURE, ETC. AS PART OF THIS CONTRACT. WHERE AVAILABLE, SPACE ALLOWANCES SHOULD BE MADE WITH 45 DEGREE ELBOWS WITH TURNING VANES.
- G. ALL CEILING DUCTFITTERS SHALL BE PROVIDED WITH 4-WAY THROW PATTERN UNLESS OTHERWISE NOTED.
- H. TRANSITION AS NECESSARY FROM DUCT SIZES INDICATED ON PLAN TO EQUIPMENT DUCT CONNECTION.

1. DUCTWORK AND PIPING SHALL BE FOR GENERAL RATING PURPOSES ONLY. CONTRACTOR SHALL CONFIRM EXISTING ROOFING WITH ALL OTHER TRADES AND PROVIDE ALL NECESSARY TRANSITIONS, HIGH POINT DRAINS AND LOW POINT DRAINS AND OFFSETS NECESSARY TO INSTALL A COMPLETE AND FUNCTIONING SYSTEM.
- K. THE CEILING SPACE FROM THE BOTTOM OF THE CEILING GRID TO A MINIMUM OF 6" ABOVE THE BOTTOM OF THE CEILING GRID IS RESERVED FOR INSTALLATION OF CEILING MOUNTED ITEMS (I.E. LIGHT FIXTURES, SPEAKERS, DIFFUSERS), NO PIPING, DUCTWORK, CONDOLITS, ETC., EXCEPT THOSE SERVING THE CEILING MOUNTED ITEM. IT IS ALLOWED TO BE INSTALLED IN THIS SPACE, UNLESS OTHERWISE APPROVED BY THE RESIDENT ENGINEER.

- L** CONTRACTOR IS REQUIRED TO FOLLOW ALL OSHA REGULATIONS CONCERNING CONFINED SPACE. THE SUPERINTENDENT IS REQUIRED TO HAVE COMPLETED, AS A MINIMUM, OSHA'S 30-HOUR TRAINING AND BE KNOWLEDGEABLE OF GENERAL SAFETY REQUIREMENTS FOR CONFINED SPACES. ELECTRICAL, TIE, APPLICABLE SUBORDINATES ARE TO HAVE A COMPETENT PERSON ON SITE WHEN REQUIRED BY OSHA.
- M** IF ACCESSING A CONFINED SPACE, THE CONTRACTOR IS REQUIRED HAVE THEIR OWN CONFINED SPACE ENTRY AND RESCUE PLAN. THE CONTRACTOR IS REQUIRED TO HAVE THE PLAN APPROVED BY THE MONITOR AND TO FOLLOW IT TO PREVENT ACCIDENTS. THE CONTRACTOR IS REQUIRED TO HAVE THE CONTRACTOR MUST ENTER A PRIMARY SCENE WHOM, IN ADDITION TO A CONFINED SPACE MONITOR, THEY MUST HAVE PROPER OSHA RESCUE EQUIPMENT FOR A RESCUE REQUIRED

- N. YA WILL SHUT DOWN EXISTING UTILITY SYSTEM AS NECESSARY FOR CONTRACTORS TO PERFORM REQUIRED WORK. CONTRACTOR IS RESPONSIBLE FOR DEBRISING EXISTING WET SYSTEMS, SUCH AS WATER, CHILLED WATER, HEATING WATER, ETC. AS REQUIRED TO ACCOMPLISH NEW WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXISTING UTILITY SYSTEMS. CONTRACTOR HAS REVIEWED IT IS APPROPRIATE TO SAUSAGE EATING, EATING TREATED WATER IN OPEN CONTAINERS. APPROVED BY THE WA, AND RE-INSTALLED IT INTO THE SYSTEM UPON COMPLETION OF WORK. ANY TREATED WATER NOT RE-INJECTED IS TO BE PROPERLY DISPOSED OF.

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## MECHANICAL

		CONTROL, I-STAT, SENSORS
		DAMPERS
		DEADEND
		EXHAUST DIFFUSER
		RETURN DIFFUSER
		SUPPLY DIFFUSER
		DIMENSIONS
		EXHAUST DUCT
		RETURN DUCT
		SUPPLY DUCT
		EQUIPMENT
		DIESEL FUEL TANKS, LINES
		NOTES
		PIESSES, SCHEMATICS, DIAGRAMS
CH	CH	CHILLED WATER SUPPLY
CHR	CHR	CHILLED WATER RETURN
CHW	CHW	GEOTHERMAL RETURN
CMS	CMS	GEOTHERMAL SUPPLY
HRW	HRW	HOT WATER RETURN
HW	HW	HOT WATER SUPPLY

<h1 style="margin: 0;">95% SUBMISSION</h1>		<div style="border: 1px solid black; padding: 5px; width: 100px; margin: 0 auto;">             REVISIONS           </div>	
		<div style="border: 1px solid black; padding: 5px; width: 100px; margin: 0 auto;">             DATE           </div>	
		<p><b>C.W. MOORE PLAZA</b>          290 S. 5TH ST.          SUITE 400          (208) 345-4655 • FAX (208) 345-1658  <a href="http://www.cshqa.com">http://www.cshqa.com</a></p>	
<p><b>BOB M. EVERTON, P.E.</b>          C.W. MOORE PLAZA          SUITE 400          BOISE, IDAHO          PHONE (208) 345-4655 FAX (208) 345-1658</p>		<p>THESE DRAWINGS AND SPECIFICATIONS, AS REPRESENTED BY THE SEAL OF THE PROFESSIONAL ENGINEER, ARE MY OWN WORK AND I AM NOT PROVIDING ANY OTHER FORM OF ASSISTANCE OR SUPPORT TO ANY OTHER PERSON OR ENTITY IN THE PREPARATION OF THESE DRAWINGS AND SPECIFICATIONS. I AM NOT PROVIDING ANY OTHER FORM OF ASSISTANCE OR SUPPORT TO ANY OTHER PERSON OR ENTITY IN THE PREPARATION OF THESE DRAWINGS AND SPECIFICATIONS. I AM NOT PROVIDING ANY OTHER FORM OF ASSISTANCE OR SUPPORT TO ANY OTHER PERSON OR ENTITY IN THE PREPARATION OF THESE DRAWINGS AND SPECIFICATIONS.</p>	
<p><b>STAMP</b></p>		<p><b>MECHANICAL          PRELIMINARY          NOT FOR          CONSTRUCTION</b></p>	
<p><b>APPROVED: MECHANICAL          COVER SHEET</b></p>		<p><b>PROJECT TITLE</b>          VAMC          ENERGY UPGRADES          PHASE ONE BUILDING</p>	
<p><b>APPROVED: DESIGN CHIEF</b></p>		<p><b>BUILDING NUMBER</b>          33</p>	
<p><b>APPROVED: SERVICE DIRECTOR</b></p>		<p><b>CHECKED</b>          RME</p>	
<p><b>LOCATION</b>          BOISE, IDAHO</p>		<p><b>ISSUED</b>          DRG</p>	
<p><b>PROJECT NO.</b>          531-10-114</p>		<p><b>DATE</b>          03/03/11</p>	
<p><b>ISSUED NO.</b>          MO.1</p>		<p><b>DATE</b>          MAR. 08. or 32</p>	
		<p>DEPARTMENT OF VETERANS AFFAIRS</p>	